

## ABSTRACT

A wall thickness of each layer or a size of a space between layers of a multilayer structured container can be easily measured with high accuracy.

5 According to a method for measuring an inner size of a container by irradiating a multilayer structured container 2 as a target for measurement with X-rays radiated from an X-ray generating source 12 and by detecting the X-rays transmitting the container by a detector 14, the X-ray generating source 12, a slit 15, and the detector 14 perform a linear scan to the container

10 2 in a direction orthogonal to beams 17 in addition to disposing the slit (a double slit) 15 which narrows the X-rays transmitting the container down to the narrow beams 17 in front of the detector 14 and disposing a focal spot 12a of the X-ray generating source 12, a center of the slit 15, and a center of the detector 14 on a same straight line. The X-ray beams 17 are irradiated

15 substantially parallel to a tangential direction of a container peripheral wall, and the X-rays transmitting the container peripheral wall are detected by the detector; thereby a thickness of each layer or the space between layers of the container peripheral wall is measured based on an obtained intensity distribution curve of damping on transmission.